

**IN THE SPECIFICATION:**

**Please replace paragraph 6 at page 35 continuing onto page 36, with the following rewritten paragraph:**

At step ~~S211~~ S21, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step ~~S212~~ S22. At step ~~S212~~ S22, the operation section 113 decides whether the instruction decoded at step ~~S211~~ S21 is executable, in this case, whether the write address allocated to the input process packet PPb is present in addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has.

**Please replace paragraphs 1, 2, 3 and 4 at page 36, with the following rewritten paragraph:**

If having decided at step ~~S212~~ S22 that the write address allocated to the process packet is not present in the addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the operation section 113 skips steps ~~S212-S215~~ S22-S25 and the process goes to step ~~S216~~ S26 where it sets the request signal s<sub>2</sub> to "1". At step ~~S217~~ S27, the operation section 113 makes the input process packet PPb as it is a process packet PPc to be output and outputs it and the process goes to step ~~S218~~ S28 where it returns the request signal s<sub>2</sub> to "0" to end the processing.

If having decided at step ~~S212~~ S22 that the write address allocated to the process packet is present in the addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the process goes to step ~~S213~~ S23 where the operation section 113 decides whether the same process packet as this input process packet PPb has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PPb and ends the processing. In this case, the input

process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If having decided at step ~~S213~~ S23 that it has not yet been processed, the process goes to step ~~S214~~ S24 where the operation section 113 executes the instruction allocated to the input process packet PPb. That is, the operation section 113 writes the image data allocated in the input process packet PPb into the memory 120<sub>n</sub> and the process goes to step ~~S215~~ S25.

At step ~~S215~~ S25, the operation section 113 rewrites, as necessary, the state portion in the input process packet PPb in accordance with the processing it has performed at step ~~S214~~ 24 and the process goes to step ~~S216~~ S26.

**Please replace paragraph 1 at page 37, with the following rewritten paragraph:**

At step ~~S216~~ S26, the operation section 113 sets the request signal s<sub>2</sub> to "1". At step ~~S217~~ S27, the operation section 113 makes the input process packet PPb altered at steps ~~S214~~ S24 and ~~S215~~ S25 a process packet PPc to be output and outputs it and then, at step ~~S218~~ S28, returns the request signal s<sub>2</sub> to "0" to end the processing.

**Please replace paragraphs 1, 2, 3 and 4 at page 38 continuing onto page 39, with the following rewritten paragraph:**

At step ~~S311~~ S31, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step ~~S312~~ S32. At step ~~S312~~ S32, the operation section 113 decides whether the instruction decoded at step ~~S311~~ S31 is executable, in this case, whether the read address allocated to the input process packet PPb is present in addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has.

If having decided at step ~~S312~~ S32 that the read address allocated to the process packet is not present in the addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the operation section 113 skips steps ~~S313-S315~~ S33-S35 and the process goes to step ~~S316~~ S36 where the operation section 113 sets the request signal  $s_2$  to "1". At step ~~S317~~ S37, the operation section 113 makes the input process packet PPb as it is a process packet PPc to be output and outputs it and the process goes to step ~~S318~~ S38 where it returns the request signal  $s_2$  to "0" to end the processing.

If having decided at step ~~S312~~ S32 that the read address allocated to the process packet is present in the addresses in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the process goes to step ~~S313~~ S33 where the operation section 113 decides whether the same process packet as this input process packet PPb has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PPb and ends the processing. In this case, the input process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If the operation section 113 has decided at step ~~S313~~ S33 that it has not yet been processed, the process goes to step ~~S314~~ S34 where it executes the instruction allocated to the input process packet PPb. That is, the operation section 113 reads the image data from the memory 120<sub>n</sub> and allocates the image data to the input process packet PPb and the process goes to step ~~S315~~ S35.

**Please replace paragraphs 1, 2 and 5 at page 39, with the following rewritten**

**paragraph:**

At step ~~S315~~ S35, the operation section 113 rewrites, as necessary, the state portion in the input process packet PPb in accordance with the processing it has performed at step ~~S314~~ S34 and the process goes to step ~~S316~~ S36.

At step ~~S316~~ S36, the operation section 113 sets the request signal  $s_2$  to "1". At step ~~S317~~ S37, the operation section 113 makes the input process packet PPb altered at steps ~~S314~~ S34 and ~~S315~~ S35 a process packet PPc to be output and outputs it and then, at step ~~S318~~ S38, returns the request signal  $s_2$  to "0" to end the processing.

At step ~~S411~~ S41, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step ~~S412~~ S42. At step ~~S412~~ S42, the operation section 113 decides whether the instruction decoded at step ~~S411~~ S41 is executable, in this case, whether pixels of at least one of the target block and the candidate block are stored in the memory  $120_n$  that the operation processing unit  $102_n$  has.

**Please replace paragraphs 2, 3 and 4 at page 40, with the following rewritten**

**paragraph:**

If having decided at step ~~S412~~ S42 that neither the target block nor the candidate block is stored in the memory  $120_n$  that the operation processing unit  $102_n$  has, the operation section 113 skips steps ~~S413-S415~~ S43-S45 and the process goes to step ~~S416~~ S46 where it sets the request signal  $s_2$  to "1". At step ~~S417~~ S47, the operation section 113 makes the input process packet PPb as it is a process packet PPc to be output and outputs it and the process goes to step ~~S418~~ S48 where the operation section 113 returns the request signal  $s_2$  to "0" to end the processing.

If having decided at step ~~S412~~ S42 that the pixels of at least one of the target block and the candidate block are stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, on the other hand, the process goes to step ~~S413~~ S43 where the operation section 113 decides whether the same process packet as this input process packet PPb has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PPb and ends the processing. In this case, the input process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If having decided at step ~~S413~~ S43 that it has not yet been processed, on the other hand, the process goes to step ~~S414~~ S44 where the operation section 113 executes the instruction allocated to the input process packet PPb.

**Please replace paragraphs 1, 2, 3, 4 and 5 at page 41 continuing onto page 42, with the following rewritten paragraph:**

That is, at step ~~S521~~ S51, the operation section 113 first decides whether the pixels of the target block are stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has. If having decided at step ~~S521~~ S51 that the pixels of the target block are not stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the operation section 113 skips step ~~S522~~ S52 and the process goes to step ~~S523~~ S53.

If having decided at step ~~S521~~ S51 that the pixels of the target block are stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, on the other hand, the process goes to step ~~S522~~ S52 where the operation section 113 reads the pixels of the target block stored in the

memory 120<sub>n</sub>, and allocates them to the input process packet PPb, and the process goes to step ~~S523~~ S53.

At step ~~S523~~ S53, the operation section 113 decides whether the pixels of the candidate block are stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has. If having decided at step ~~S523~~ S53 that the pixels of the candidate block are not stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, the operation section 113 skips step ~~S524~~ S54 and the process goes to step ~~S525~~ S55.

If having decided at step ~~S523~~ S53 that the pixels of the candidate block are stored in the memory 120<sub>n</sub> that the operation processing unit 102<sub>n</sub> has, on the other hand, the process goes to step ~~S524~~ S54 where the operation section 113 reads the pixels of the candidate block stored in the memory 120<sub>n</sub>, and allocates them to the input process packet PPb, and the process goes to step ~~S525~~ S55.

At step ~~S525~~ S55, the operation section 113 decides whether an absolute difference value sum can be calculated. In this case, the operation section 113 decides whether the calculation of the absolute difference value sum can be performed based on whether in the input process packet PPb, the pixels of the target block are allocated and also the pixels of the candidate block that corresponds to this target block are allocated.

**Please replace paragraphs 1, 2, 3 and 4 at page 42, with the following rewritten paragraph:**

If having decided at step ~~S525~~ S55 that the calculation of the absolute difference value sum is impossible, that is, if in the pixels of the target block are not allocated to the input process packet PPb or though the pixels of the target block are allocated, the pixels of the candidate

block that corresponds to this target block are not allocated thereto, the operation section 113 skips step ~~S526~~ S56 to end execution of the absolute-difference-value sum calculation instruction and the process goes to step ~~S415~~ S45.

If having decided at step ~~S525~~ S55 that the calculation of the absolute difference value sum is possible, that is, if the pixels of the target block are allocated to the input process packet PPb as well as the pixels of the candidate block that corresponds to this target block are allocated to the input process packet PPb, on the other hand, the process goes to step ~~S526~~ S56 where the operation section 113 calculates an absolute difference value between each of the pixels of the target block allocated to the input process packet PPb and each of the pixels of the corresponding candidate block and also calculate a total sum of these values.

The operation section 113 adds up this total sum of these absolute difference values and an absolute difference value sum allocated to the absolute-difference-value sum portion in the input process packet PPb and overwrites it by the added value as a new absolute difference value sum in the absolute-difference-value sum portion in the input process packet PPb, to end execution of the absolute-difference-value sum calculation instruction and the process goes to step ~~S415~~ S45.

At step ~~S415~~ S45, the operation section 113 rewrites as necessary the state portion in the input process packet PPb in accordance with processing it has performed at step ~~S414~~ S44 and the process goes to ~~S416~~ S46.

**Please replace paragraph 1 at page 43, with the following rewritten paragraph:**

At step ~~S416~~ S46, the operation section 113 sets the request signal  $s_2$  to "1". At step ~~S417~~ S47, the operation section 113 makes the input process packet PPb altered at steps ~~S414~~

S44 and ~~S415~~ S45 a process packet PPc to be output and outputs it and then, at step ~~S418~~ S48, returns the request signal  $s_2$  to "0" to end the processing.